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TITLE

Molecular identification of *Trichuris* species isolated from *Rhombomys opimus* in Golestan Province, Iran

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Background: Species determination of *Trichuris* base on the morphology of adult females is difficult and molecular characterizations of this nematode can be helpful in this regard. In the current study, a female of *Trichuris* species isolated from great gerbil (*Rhombomys opimus*) in Golestan Province, Iran were characterized by nucleotide sequencing.
Methods: DNA of the adult *Trichuris* sp. was isolated by GeneAll Purification Kit and ITs1-5.8s-ITS2 region was amplified by NC5, NC2 primers. The PCR product was sent for nucleotide sequencing.
Results: Alignments of the sequences of the current study, using Basic Local Alignment Search Tool, revealed existence of 99% homology between current isolate and *Trichuris* sp. H78 (Accession number: FN543202) isolate in GenBank from *Rhombomys* sp. in Kazakhstan.
Conclusion: Due to genetic and morphological variability in genus *Trichuris* and influence of the host on this variation, it is necessary to use additional criteria, such as molecular analysis, for phylogenetic and taxonomic studies.